The new products that caught our eye at the 1994 Saltex show at Windsor Racecourse





Staffordshire company **Turfmech Machinery Ltd** has produced a frame that will enable one tractor to pull two seven-gang mowing units simultaneously. The Turfmech Accumulator 7/7 frame enables one man to mow 30ft (9.5m) in one pass. Turfmech tells us: "The Accumulator's frame geogmetry has been designed so that mowing performance both in a straight line and when turning at the end of a run remains at peak levels without risk of turf scuffing or the mowers interfering with an adjacent unit." To that end, all PTO drive shafts have wide angle joints to accommodate tight turns and both they and the unit's oversize gearboxes are rated to match the recommended tractor power input of 40-60hp required to tow and operate the 14 individual mowing gangs.

Hydraulic pipework and quick release couplings are provided on the Accumulator's frame to enable lifting of the mowing units for transport. The frame is supported by four large castor wheels and has fully-floating arms to ensure precise, level mowing on undulating or uneven turf. All pivots are provided with greasing points. Price is £5,900.



Kubota unveiled a three-strong range of tractors in the 30-40hp class with features that include fully synchronised transmission, creep gear box and independent PTO. All three models in the Grandel range – the 35.1 (SAE) hp L3300, the 38.5 (SAE) hp L3600 and the 45.3 (SAE) hp L4200 – are powered by Kubota E-TVCS indirect diesel engines which, according to Kubota, "have been designed and developed to meet the world's toughest emission standards and engineered to combine high torque with low noise and vibration."

One of the main attractions of the new tractors for greenkeepers is the fully synchronised transmission. This should facilitate smoother gear changes, allowing the driver to change gear between any of the four speeds in the main transmission whilst on the move. In addition, the hydraulic shuttle allows direction changes between forward and reverse.

The transmission with a range of 16 forward and 16 reverse gears incorporates creep gear box as a standard feature on all three models and is ideal for operations such as verti-draining, planting and trenching.

A hydraulically activated independent PTO is common to the range and ensures that

attachments can be easily and smoothly engaged and disengaged to reduce possible attachment damage. It also means that the operator can engage and disengage attachments either on the move or when static.

The Grandel tractor range also has a powerful lift capacity up to 1050 kgs. Prices, excluding VAT, are: L3300 – £13,350 fitted with rollbar, £16,810 fitted with 'Q' cab; L3600 – £17,600 fitted with 'Q' cab; L4200 – £18,740 fitted with 'Q' cab.

John Deere launched the 220 walk-behind greens mower which features a 3.7hp Kawasaki air-cooled engine and an 11blade, 56cm (22in) reel for improved frequency of cut, at 4.9mm/cut. With an optional speed kit, this figure drops to only 3.9mm/cut. Standard cutting height with a 3mm bedknife is 3.2mm or, with the optional tournament bedknife, only 2.8mm. Attachments include a vertical cutter and rotary brush. Price is £2,611.

Also on show was a new Mauser cab that can be fitted to the John Deere 3235 lightweight fairway mower introduced earlier this year. It will provide the operator with extra comfort and lower noise levels.



Of great interest to our readers in the local authority sector is **Hayter**'s latest rugged workhorse triple mowing machine – the Beaver LT312.

The LT312 combines the power of a 29hp Lombardini water-cooled diesel engine with a closed loop, hydrostatic, 2-wheel-drive transmission system to give a variety of grass cutting and transport speeds.

Features of this British-built machine are sturdy construction and a high mowing rate up to 7mph, depending on ground conditions. The 8in cutting reels are offered in 4-, 6- or 8blade configurations and can be used in either floating or fixed mode for maximum versatility and performance. Cutterheads can be used independently and the overall cutting width is 2.13m (84in).

For added traction in wet or steep conditions a differential lock is incorporated. For travelling between sites it has a road speed of 14mph while the cutterheads lift to give a transport width of 1.4m (55in).

The latest in the Condor line-up, the Condor Hydrostatic, was also on display. This mowing machine complies fully with all the latest CE specifications and boasts a Honda GX340 engine with an output of 11hp. The 36in (91cm) Rotary head featured on the display machine has dual rotating cutterheads, each fitted with cutterbars, variable height of cut and swivel castor wheels for extra manoeuvrability.



Nottingham-based **Rake 'N' Lift & Co** now has more than 100 different types of rakes. There are rakes that look more like shovels with teeth and there are plastic bunker rakes that go by the name of Parthenon and The Zeus.

For courses where vandalism and theft is a big problem Rake 'N' Lift have developed the Caddy Bunker Rake which golfers can take round in their golf bags. There are also rakes for removing water off greens. The Liquidsand Rake and Squeegee Rake are manufactured in aluminium and have detachable rubber and plastic blades.



Dennis displayed its new FT610. With a 24in cut, this machine features an interchangeable cassette system and full range of cassette heads. A total of nine different cassette options are available, so you can cut, comb, scarify, de-thatch, brush, roll, sorrel roll and spike with this machine. Other accessories include a non-powered transport carrier and backlapping kit for use on the removed cylinder cassette. Also new is a verti-cutter system that fits into the shell of Dennis' 36 and 30in Premier mowers.



Toro's leading greens mower, the Greensmaster 3100, is now available in a threewheel drive model, the 3100-3WD. Toro sales manager David Cole told us: "The threewheel drive feature allows operators to reach and mow very difficult areas where additional traction is required to get the job done, such as sloped or stepped greens or steeply elevated tees." He added that the Greensmaster 3100-3WD will especially benefit the many newer golf courses which frequently feature elevated greens or very hilly areas.

Toro also introduced a more powerful replacement for the company's leading lightweight fairway mower and a smaller version of the high capacity Fairway Aerator, for use with smaller tractors. The Reelmaster 5300-D replaces the RM 5100-D and comes with a 32hp Mitsubishi S3L engine, a larger radiator to cool this three-cylinder, 1318cc diesel engine, larger hydraulic reel motors, and larger hydraulic pump. The HC4000 is a mid-sized aerator which can be used with tractors of 25-45hp.

Rolawn's new Minster greens turf, officially launched at the show, has already been laid at Wentworth.

"The cultivars in the new turf exactly match those on our new greens," says course manager Chris Kennedy. The fine textured turf comprises 40% Bargreen (chewings fescue), 40% Barcrown (slender creeping red fescue) and 20% Bardot (browntop bent).

The turf has been installed on the club's new two-tier putting green in front of the new clubhouse. **Pro-Seed Equipment Ltd** showed the new Prosweep which has been designed and developed to brush topdressing into the base of the sward quickly, to stripe fairways, and to sweep light leaves and rubbish into rows for speedy collection.

The £17,000 **Ransomes** E-Plex, the world's first all-electric triple greens mower which we featured last issue, attracted a great deal of interest. Greenkeepers from several top clubs were seen pawing over the machine which has no engine and no hydraulic system.

Zeneca Professional Products, formerly ICI Professional Products, celebrated its name change by launching two new publications, a product manual and a product label manual, and two new products: Cleanrun, a feed and weed mini granular conventional fertiliser with an NPK analysis of 9:7:7, and a nonresidual systemic herbicide called Touchdown LA for control of annual and perennial grass and broad-leaved weeds in non-crop areas.

Claymore Grass Machinery introduced the Columbia Parcar range of golf cars, people movers and utility vehicles. There is a choice of either 3.2hp electric or 8hp twostroke petrol models. Both have continuous variable transmission, which eliminates a gearbox. For strength, all the units are of tubular frame construction, and the dual coil springs and shock absorbers help provide a smooth ride. A camber adjustment system keeps the front wheels flat on the ground to reduce turf compaction or the formation of ruts. To reduce noise, the petrol powered version has foam-lined engine compartment and wheel-wells, plus a tuned exhaust system. In addition, the engine has anti-vibration mountings. A feature of the Columbia Utilitruck is that the shell and frame components are manufactured separately to reduce replacement costs if there is an accident.

Dixon & Holliday Ltd says its new Alpina VIP42 knapsack brushcutter is designed for the professional user who requires a machine which can be operated for extended periods on power demanding operations. Powered by a 41cc two-stroke motor which is made by Alpina themselves, the unit is said to have excellent torque back-up which allows it to be operated at well below maximum revs. The power unit, which is carried on the operator's back in a well padded frame with wide straps, weighs under 7kgs (151bs). The straps have a quick release clip for ease of putting on and taking off. A 1.5 litre (2.7 pint) fuel tank extends working time, and the captive cap ensures that it cannot be mislaid. A diaphragm carburettor, priming bulb and solid state ignition are designed to ensure easy and reliable starting. The machine is supplied with a 2-line trimmer head and a slasher blade with guard as standard plus tool kit and flexible shaft lubricant.



After years of development, **Major Equipment Ltd** has launched two gang mowers. Both the three and five gang models are land drive with a range of cylinder options. The five gang Ranger has a cutting width of 11ft 4in, cuts at 10mm to 40mm, while the six blade reel cuts at 38 cuts per yard. Features include freewheel sprag type clutch, rear rollers, 18in or 20in spun steel wheels with renewable studs, gang suspension system with adjustable spring pressure to allow the cutting units to follow the ground contours accurately, individual gang steerage system to eliminate skidding over turf, and wide low profile carrier frame tyres to prevent marking of turf. Price of the three gang starts at £5,250 and the five gang Ranger with hydraulic lift starts at £11,800, the five gang trailed version starts at £8,900.